

ABSTRACT

An expandable medical device has a plurality of elongated struts joined together to form a substantially cylindrical device which is expandable from a cylinder having a first diameter to a cylinder having a second diameter. At least
5 one of the plurality of struts includes at least one opening extending at least partially through a thickness of said strut. A beneficial agent is loaded into the opening within the strut in layers to achieve desired temporal release kinetics of the agent. Alternatively, the beneficial agent is loaded in a shape which is configured to achieve the desired agent delivery profile. A wide variety of
10 delivery profiles can be achieved including zero order, pulsatile, increasing, decrease, sinusoidal, and other delivery profiles.